

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A method of administering ~~An irradiation device for~~ therapeutic applications for the treatment of primary T cell mediated skin disorders including atopic dermatitis (neurodermatitis), cutaneous T cell lymphoma, lichen ruber, alopecia areata, systemic lupus erythematoses and psoriasis and cosmetic applications including cosmetic tanning, wherein said ~~irradiation device~~ method comprises the step of using an irradiation device for treating primary T cell mediated skin disorders, wherein said irradiation device includes at least one optical radiation source which, on an area to be irradiated, is operatively arranged for generating an irradiance in a first wavelength range including 400nm to 440nm of greater than 60 mW/cm<sup>2</sup> and generating an irradiance in a second wavelength range including 300nm to 400nm of less than 21 % of the irradiance in the first wavelength range and a cooling unit for cooling a surface of the area to be irradiated.

2. (currently amended) The ~~irradiation device~~ method of claim 1, wherein said optical radiation source is a mercury low-pressure discharge lamp comprising a phosphor selected from the group consisting of Sr<sub>2</sub>P<sub>2</sub>O<sub>7</sub>:Eu, (SrMg)<sub>2</sub>P<sub>2</sub>O<sub>7</sub>:Eu, Sr<sub>5</sub>Cl(PO<sub>4</sub>)<sub>3</sub>:Eu, BaMg<sub>2</sub>Al<sub>18</sub>O<sub>27</sub>:Eu, SrMgAl<sub>18</sub>O<sub>30</sub>:Eu, BaMg<sub>2</sub>Al<sub>16</sub>:Eu:Mn, Sr<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>:Eu, Ba<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>:Eu, CaWO<sub>4</sub>:Pb and CaWO<sub>4</sub>.

3. (currently amended) The ~~irradiation device~~ method of claim 1, wherein said optical radiation source is a metal halide lamp having a firing gas, mercury and at least one metal halide additive selected from the group consisting of gallium indium iodide, gallium iodide, selenium, antimony, zinc and cadmium.

4. (currently amended) The ~~irradiation device~~ method of claim 3, wherein a weight ratio between said mercury and said at least one metal halide additive is 10:100.

5. (currently amended) The ~~irradiation device~~ method of claim 1, wherein said optical radiation source comprises a discharge lamp including two electrodes arranged in a quartz tube, wherein electrode regions of said discharge lamp proximate said two electrodes comprise zirconium oxide, thereby exhibiting a partially reflective characteristic.

6. (currently amended) The ~~irradiation device~~ method of claim 1, further comprising using one of a glass pane as a UVB filter and a transparent, UV-opaque plastic as a UV filter arranged between said optical radiation source and the surface to be irradiated.

7. (currently amended) The ~~irradiation device~~ method of claim 1, further comprising using a UVB filter comprising an evacuated casing tube arranged around said optical radiation source, wherein said evacuated casing tube comprises a glass pane.

8. (currently amended) The ~~irradiation device~~ method of claim 7, wherein an inner side of the casing tube is coated with a phosphor selected from the group consisting of  $\text{Sr}_2\text{P}_2\text{O}_7\text{:EU}$ ,

(SrMg)<sub>2</sub>P<sub>2</sub>O<sub>7</sub>:Eu, Sr<sub>5</sub>Cl(PO<sub>4</sub>)<sub>3</sub>:Eu, BaMg<sub>2</sub>Al<sub>18</sub>O<sub>27</sub>:Eu, SrMgAl<sub>18</sub>O<sub>30</sub>:Eu, BaMg<sub>2</sub>Al<sub>16</sub>:Eu:Mn, Sr<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>:Eu, Ba<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>:Eu, CaWO<sub>4</sub>:Pb and CaWO<sub>4</sub>.

9. (currently amended) The ~~irradiation device~~ method of claim 1, wherein said optical radiation source includes an electrode-free mercury metal halide lamp comprising a quartz bulb filled with at least one dopant selected from the group consisting of gallium, gallium iodide, gallium bromide and gallium chloride, said optical radiation source further comprising a resonator formed by a metallic shield and at least one magnetron with an antenna operatively arranged for introducing electromagnetic energy into said resonator.

10. (currently amended) The ~~irradiation device~~ method of claim 9, wherein said resonator is an E<sub>01</sub> mode resonator for the electromagnetic radiation introduced by said magnetron.

11. (currently amended) The ~~irradiation device~~ method of claim 1, further comprising using an IR filter with said irradiation device for treating primary T cell mediated skin disorders.

12. (canceled)

13. (currently amended) The ~~irradiation device~~ method of claim 1, wherein said cooling unit comprises a transparent casing tube with an inlet and an outlet, said transparent casing tube being arranged around said optical radiation source, and an IR-absorbent coolant is circulated via said inlet and said outlet (13).

14. (currently amended) The ~~irradiation device~~ method of claim 13, wherein said coolant comprises one of water and silicone oil.

15. (previously presented) A method for treating primary T cell mediated skin disorders, comprising the step of treating a subject with an optical radiation source that generates, on the area to be irradiated, a first irradiance in a first wavelength range including 400nm to 440nm and a second irradiance in a second wavelength range including 300nm to 400nm, said first irradiance being at least 20 W/cm<sup>2</sup> on the area to be irradiated and said second irradiance being less than 21% of said first irradiance on the area to be irradiated, such that the subject receives an irradiation dose within the range including 10 J/cm<sup>2</sup> to 200J/cm<sup>2</sup> from said first irradiance.